

Before the
Federal Communications Commission
Washington, DC 20554

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JUN 15 1994

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of

Allocation of Spectrum Below
5 GHz Transferred from
Federal Government Use

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ET Docket No. 94-32

COMMENTS OF
THE MOBILE AND PERSONAL COMMUNICATIONS DIVISION
AND THE FIXED POINT-TO-POINT COMMUNICATIONS SECTION OF THE
TELECOMMUNICATIONS INDUSTRY ASSOCIATION

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TELECOMMUNICATIONS INDUSTRY ASSOCIATION**

I. INTRODUCTION AND SUMMARY

The Mobile and Personal Communications Division and the Fixed Point-to-Point Communications Section of the Telecommunications Industry Association ("TIA") is pleased to submit these comments to the Federal Communications Commission in response to the FCC's notice of inquiry ("Notice") on 50 MHz of spectrum to be reallocated from federal government use.¹ TIA recently submitted comments to the National Telecommunications and Information Administration ("NTIA") on the Preliminary Spectrum Reallocation Report ("NTIA Preliminary Report"),² which was prepared by NTIA pursuant to Title VI of the Omnibus Budget Reconciliation Act of 1993 ("Title VI").³ A copy of TIA's comments to NTIA is attached and incorporated in the present filing.

¹ *Notice of Inquiry*, ET Docket No. 94-32 (Released May 4, 1994).

² NTIA Special Publication 94-27 (Released February 10, 1994).

³ Omnibus Budget Reconciliation Act of 1993, Pub. L. No. 103-66, § 6001, 107 Stat. 312, 379-401 (1993), to be codified at 47 U.S.C. §§ 111-117.

TIA members are representatives of the telecommunications equipment manufacturing community, the products of which will enable the transformation of reallocated spectrum into new services and offerings for American consumers. Thus, TIA has a clear interest in this proceeding.

TIA strongly supports the reallocation of federal spectrum to private use. If judiciously selected and allocated, such spectrum can contribute to the increased efficiency and productivity of the Nation's public safety agencies and industries, while promoting the development of wireless access to the National Information Infrastructure ("NII"). These are the overarching needs of the private sector that should be addressed through the reallocation of federal spectrum.

Unfortunately, TIA has significant concerns about the technical viability of the specific frequency bands proposed by the NTIA for reallocation. Indeed, as discussed in detail below, at least 15 MHz of the 50 MHz of spectrum addressed in this instant proceeding may provide little, if any, incremental benefit to the private sector. Although TIA supports the reallocation of the identified spectrum, for the manufacturing community will surely develop products to utilize this spectrum, TIA notes that the identified 50 MHz may offer little opportunity to satisfy the need for advanced wide-area land mobile systems for public safety agencies, businesses and utilities. Accordingly, TIA urges the Commission to work with NTIA and Congress to proceed swiftly with the reallocation effort while placing a higher priority on the needs of such users.

II. REALLOCATED FEDERAL SPECTRUM IS NEEDED TO HELP SOLVE THE PRESSING COMMUNICATIONS NEEDS OF THE PRIVATE SECTOR

In its Notice, the Commission has asked for comments on the utility of the bands proposed for reallocation by the NTIA -- the 2390-2400 MHz, 2402-2417 MHz, and 4660-4685 MHz bands. In responding to Congressional direction, the Commission is seeking specific comments on the utility of the above bands for satisfying the communications needs of the public safety community.⁴ To this end, the Commission has incorporated into this proceeding a Petition for Rule Making filed by the Coalition of Private Users of Emerging Multimedia Technologies ("COPE") to allocate spectrum to accommodate advanced private land mobile services.⁵ That petition seeks the allocation of at least 75 MHz for public safety, public service and industrial land mobile operations to support the advanced wireless imaging and decision processing/remote file access capabilities for the private radio user community.⁶ Radio communications systems employed by such entities tend to be specialized in nature and user owned and operated.

TIA believes that the allocation of spectrum to support advanced wide area land mobile communications of the private radio user community is the overarching need facing the wireless industries. Therefore, TIA strongly supports the proposals embodied within the COPE petition and asks that the Commission, in cooperation with the NTIA, identify

⁴ Notice at ¶ 9.

⁵ In the matter of Amendment of Parts 2 and 90 of the Commission's Rules to Allocate Spectrum to Accommodate Advanced Private Land Mobile Communication Services, filed December 23, 1993, Coalition of Private Users of Emerging Multimedia Technologies (hereinafter COPE Petition).

⁶ COPE Petition at iv.

spectrum homes for these technologies. The Commission should recognize that the unique and specialized needs of the private radio user community, including the public safety users, cannot be wholly satisfied by carrier-based systems such as personal communications services ("PCS").

As opposed to simply interconnected mobile telephone service, new spectrum for advanced private wireless systems will be used for crime control, energy conservation and management, health care, fire and emergency medical services ("EMS"), pollution control, improving industrial productivity, and the introduction of intelligent vehicle highway systems ("IVHS"). In the area of crime control, additional spectrum can enable mobile transmission of images to and from law enforcement field personnel, transmission of maps, floor layouts and architectural drawings, tactical use of live mobile video, high-resolution graphics information to vehicles, personnel and vehicle tracking systems, and a locator service ("wireless dog tags").

For energy conservation and management, expected new offerings include advanced distribution automation, demand-based management, pipeline monitoring, and real-time monitoring, alerting, and control of hazardous material handling. Health care and EMS functionalities enabled will include remote monitoring of patients' vital signs, mobile transmissions of layouts, transmission of visual signals and physician instructions, and high-speed transmission of high-resolution medical imagery. Additional spectrum also can enable pollution control functionalities including remote visual inspection of pipes and cables exposed during excavation projects. Industrial productivity can be improved with new spectrum to support, for example, auto-notification of remote parts shortages, vehicle and

personnel tracking systems, safety and security inspection of inaccessible locations, automation of process and quality control, and wireless face-to-face conferencing. Finally, spectrum is required to enable IVHS systems that provide very intelligent traffic management, weighing and inspection of commercial vehicles in motion, tracking containers throughout multimodal shipments, electronic collection of tolls and transit fares, and automatic alerting of dispatchers for emergencies.

As further described below, the three bands at issue in this proceeding have shortcomings that preclude their utility in satisfying the needs expressed above.⁷ Although TIA believes that wide-area mobile operations can utilize frequencies up to 3 GHz -- local area wireless and fixed operations have greater flexibility to operate in bands above 3 GHz -- the proposed 2.4 GHz bands are not well-suited to paired frequency use for traditional half-duplex land mobile operations. Further, they are small blocks with little probability of aggregation. In addition, the on-going proliferation of non-government industrial, scientific, and medical ("ISM") devices, including 80 million consumer microwave ovens, raises serious questions concerning the real value of the bands proposed. Thus, there will remain a continued need for spectrum to support wide-area land mobile systems that must be addressed in the very near future through NTIA or FCC actions. As for the 50 MHz proposed for immediate reallocation, TIA is concerned that the technical characteristics of these bands,

⁷ This is not to say that any one of the frequency bands could not be used to address one or more of the above mentioned applications. For example, some TIA members believe that the 2390-2400 MHz band may be useful for short-range signalling or other communications integral to IVHS networks. However, as further addressed in these comments, the spectrum identified by the NTIA appears to be ill-suited to communications segments of IVHS, public safety, public service, and individual systems.

combined with the minimal federal usage and significant non-federal usage already in place, imply that little incremental benefit will be realized by federal withdrawal.

III. THE 50 MHZ OF SPECTRUM PROPOSED FOR REALLOCATION MAY PROVIDE LITTLE INCREMENTAL VALUE TO NON-FEDERAL USERS

A. THE SPECIFIC BANDS PROPOSED BY NTIA ALL HAVE TECHNICAL SHORTCOMINGS

1. THE 2390-2400 MHZ BAND

According to the NTIA Preliminary Report, this band is used by the military for radar testing systems, such as target scattering and enemy radar simulators, and for telemetry systems. The amateur service also is allocated in this band on a secondary basis. NTIA states that the band has potential for new non-federal radiolocation and fixed and mobile communications technologies, and points out that it is located in close proximity to the 1850-2200 MHz band recently allocated by the FCC for PCS.⁸ TIA believes, however, that the highly sensitive receivers and/or high power transmitters of the National Aeronautics & Space Administration's deep space network in the adjacent bands may make this 10 MHz band difficult to use. Further, as described below, TIA is concerned that commercial sharing with the amateur service may be difficult.

⁸ NTIA Preliminary Report at pp. v - vi. TIA notes that subsequent to the NTIA's Preliminary Report, the FCC modified its PCS allocation to place both licensed and unlicensed PCS all within the 1850-1990 MHz band.

2. THE 2402-2417 MHZ BAND

The NTIA Preliminary Report claims the 2402-2417 MHz band has "potential for new non-Federal radiolocation and fixed and mobile communications technologies, and [is] located in close proximity to the 1850-2200 MHz band recently allocated by the FCC for personal communications services ("PCS")."⁹ The obvious implication is that this band would be valuable for non-federal wireless communications. While this band's basic location in the spectrum raises little concern, the noisy environment caused by existing usage in and around the band may have a significant impact on additional usage. Therefore, TIA believes the analysis that led to the NTIA's optimistic forecast for this band is flawed and that, if possible in a timely fashion, the Commission should work with NTIA to find another band for reallocation.

a. NTIA's Analysis of the Band Is Suspect

For all practical purposes, the 2402-2417 MHz band already is allocated to exclusive non-federal use. The NTIA Preliminary Report indicates that current federal use of this band is limited to military radar testing systems, and that only *five* such systems -- all of them shipborne -- occupy the entire 2360-2450 MHz band.¹⁰ Although it is clear there would be little impact on federal users if the band were reallocated, TIA believes NTIA has overstated greatly the public benefit of reallocating the 2402-2417 MHz band for non-federal use.

⁹ *Id.* at pp. v-vi.

¹⁰ *Id.* at pp. v. and 2-15.

Clearly, the band has little potential for promoting economic growth and competition through wireless services not already allowed under existing rules.

The NTIA Preliminary Report concludes that "[b]ased on the discussion in Appendix E [of the report], reallocating . . . the 2402-2417 MHz band . . . appears to be a realistic option."¹¹ TIA believes that the noise from ISM devices,¹² including microwave ovens, and from unlicensed intentional radiators,¹³ makes NTIA's assessment, at best, overly optimistic. At worst, the assessment may be misleading because it suggests that non-federal users economically could utilize the band given the current and growing noise level.

All microwave oven devices are broadband radio-frequency ("RF") generators. The assigned band is 2400-2500 MHz, but the manufacturing industry uses a 20 MHz guard band so that most energy is contained within 2420-2480 MHz. There is no signal strength regulation, but the Environmental Protection Agency has specified a 5 mW/cm² leakage limit, and spurious emissions are limited by the Commission's Rules.¹⁴ Although the 2402-2417 MHz band is in a relatively quiet part of the microwave oven band, the charts in Appendix E indicate a substantial noise floor still exists at 2402-2417 MHz.¹⁵ By virtue of international and domestic regulation,¹⁶ of course, non-ISM operations in the band must accept interference from ISM devices.

¹¹ *Id.* at p. 4-17.

¹² *See* Part 18 of the Commission's Rules, 47 C.F.R. § 18.101 *et seq.* (1992).

¹³ *See* Part 15 of the Commission's Rules, 47 C.F.R. § 15.1 *et seq.* (1992).

¹⁴ *See* 47 C.F.R. § 18.305 (1992).

¹⁵ *See* NTIA Preliminary Report at pp. E-3, 4, and 6, Charts E-1 (upper left), E-2 (upper left), and E-5.

¹⁶ *See* Radio Reg. 742, International Telecommunication Union, 1992.

NTIA points out that:

Modern radio technologies, such as advanced error correction, spread spectrum and/or packet-switched methods can very effectively overcome the effects of impulsive noise with little increase in required transmitter power. Using these techniques, up to 10 percent of the transmitted signal can be lost while still providing effective voice communications.¹⁷

Notwithstanding the fact that NTIA attributes this advice to a memorandum from the Department of Defense which, as noted above, has virtually abandoned the band and uses it only for shipborne radar systems, TIA agrees that robust communications techniques may be available to overcome the noise in the band. These techniques, even if applicable to the specific types of systems to be developed, are not without significant cost penalties. Indeed, TIA estimates that current and predicted future interference in the band could, at a minimum, double costs compared to the same system implemented without interference.¹⁸

Furthermore, the Institute of Electrical and Electronic Engineers ("IEEE") 802.11 Committee is developing interoperability standards for high speed wireless links using the 2400-2483.5 MHz band on a Part 15 basis. Reallocating a portion of this band may affect major commercial investments in this emerging world-wide market for wireless computer links.

¹⁷ NTIA Preliminary Report at p. 4-17.

¹⁸ See Appendix to TIA Comments to NTIA, attached.

b. Sharing with the Amateur Service Would Be Difficult

In determining whether bands meet Title VI's band selection criteria, NTIA was to consider "the extent to which, in general, commercial users could share the frequency with amateur radio licensees."¹⁹ TIA is unaware of any previous experience of commercial sharing with the radio amateur service except under Part 15 of the FCC's Rules.²⁰ The 2402-2417 MHz band, which is allocated on a secondary basis to the amateur service, comprises part of the spectrum known in the amateur community as the 13 cm band. NTIA believes the band is "very lightly used by radio amateurs, as compared to lower frequency bands,"²¹ and that "the amateur community can satisfy the majority of their [sic] spectrum requirements in the 13 cm band in the remaining 35 MHz [of the 13 cm band]."²² Unfortunately, no definitive analysis is revealed to substantiate and quantify this claim.

To the contrary, the NTIA Preliminary Report indicates that the Amateur Radio Relay League ("ARRL") predicts increased amateur use of the 2390-2450 MHz band,²³ and that the 2402-2417 MHz band is part of the authorized bands of the Radio Amateur Civil Emergency Service.²⁴ Indeed, one set of comments received by NTIA and forwarded to the Commission claims that the loss of 13 cm amateur radio spectrum could "have a negative

¹⁹ Title VI, *to be codified at* § 113(c)(3).

²⁰ *See* 47 C.F.R. § 15.1 *et seq.* (1992).

²¹ NTIA Preliminary Report *at* p. 5-12.

²² *Id.*

²³ *Id.* *at* p. 4-16.

²⁴ *Id.* *at* p. 3-6.

effect on public safety, particularly in the larger urban areas of our nation."²⁵ Although the degree of likely amateur radio service growth, and the reliance of public safety on amateur operations, clearly has not been established, it is apparent that amateur radio interests will oppose any reallocation of the band to new non-federal services. Even if this opposition is not successful, it will be difficult to arrange sharing with amateur licensees in this band, because amateur licensing records merely indicate the class of license and not the actual operation in a given band.

c. The Proposed Reallocation Does Not Appear to Meet the Letter or Spirit of Title VI

TIA seriously questions whether the proposed reallocation of the 2402-2417 MHz band meets the requirements of Title VI, because the band already is heavily used for non-federal operations. Title VI requires that the bands considered should be those "most likely to have the greatest potential for productive uses and public benefits . . . if allocated for non-federal use."²⁶ Indeed, as NTIA noted, "simply identifying the bands that have the absolute minimum impact on the Federal agencies would not meet the intent of Title VI with regard to the public benefit."²⁷

²⁵ Letter re: Communications Licensing and Spectrum Allocation Improvement, to Norbert Schroeder, Program Manager, NTIA, from Jerry Boyd, Chief of Police, City of Martinez, CA (March 21, 1994).

²⁶ Title VI, *to be codified at* § 113(a)(5).

²⁷ NTIA Preliminary Report *at* p. 5-14.

Because the incremental public benefit of reallocating the 2402-2417 MHz band is highly questionable, TIA is concerned that the proposed reallocation does not meet the spirit of Title VI. Furthermore, even though TIA recognizes the inherent tension between the ease of federal systems withdrawal and the added public benefit of reallocating a shared band, for all practical purposes the band already is allocated exclusively to non-federal use. This fact simply means that the proposed allocation may not meet the spirit of Title VI, which requires that all bands considered for reallocation be allocated to federal use on a primary basis. Therefore, TIA recommends that the FCC work with NTIA to reconsider this proposal.

d. The FCC's Allocation Goals May Not Be Met in this Band

The Commission's Notice states that:

The Commission's goal is to ensure that spectrum reallocated for private sector use will provide for the introduction of new services, and the enhancement of existing services. These new and enhanced services will create new jobs, foster economic growth, and improve access to communications by industry and the American public. Possible advances in communications will contribute to the development of the national information infrastructure which will provide American industry and consumers access to rapid and flexible information networks essential to competition and the global market.²⁸

Clearly, the FCC has some noble and ambitious designs for the 50 MHz reallocated from federal use. For all of the reasons stated in this subsection, however, TIA believes that it will be extremely difficult for the Commission to achieve its goals in a band with as many problems as 2402-2417 MHz presents. Further, it is clear that the band will produce little or no incremental benefit to NII development efforts. Based on initial studies, TIA estimates

²⁸ Notice at ¶ 1.

that not more than 2 MHz of the 15 MHz offered in the 2402-2417 MHz band is usable as an incremental increase in spectrum for the private sector. Accordingly, TIA believes that the net spectrum specified for the 50 MHz initial transfer required by Title VI is inadequate, and that the FCC and NTIA should work quickly to find substitute spectrum for transfer.

3. THE 4660-4685 MHZ BAND

According to the NTIA Preliminary Report, this band is used for military airborne telemetry and high-powered tropospheric scatter communications systems and has the potential to support a variety of new non-Federal fixed, mobile, and fixed-satellite technologies and associated applications. Because of its location in the spectrum, however, TIA believes that it will be very difficult to use for wide-area mobile communications. Thus, much of the initial spectrum proposed for reallocation has significant limitations for mobile usage.

IV. PROCEDURAL SHORTCOMINGS SHOULD BE REVIEWED BY THE FCC

Several procedural decisions in NTIA's spectrum identification process have impaired public participation in the 200 MHz reallocation and, TIA believes, have diminished the quality of the result. For instance, NTIA officials have indicated that public comments and the ensuing FCC analysis likely will not affect the choice of the three bands at issue in the present proceeding.²⁹ If this is true, 50% of the "exclusive" spectrum and one quarter of

²⁹ NTIA Open Meeting, April 7, 1994.

the total spectrum to be reallocated would be selected without public input. TIA believes the Commission should work with NTIA to ensure that the specific 50 MHz identified for reallocation in NTIA's proposal is not a *fait accompli*.

Unfortunately, any FCC effort to identify alternative spectrum will be hindered by another shortcoming of NTIA's work to date. Under Title VI, NTIA's final report due to Congress and the President in February, 1995, must recommend for reallocation at least 200 MHz of spectrum.³⁰ The NTIA Preliminary Report, however, was required to include "a preliminary identification of *reallocatable bands of frequencies which meet the criteria* [in Section 113 of Title VI]."³¹ But NTIA presented exactly 200 MHz of spectrum -- that is, no other band choices -- to non-federal commenters and the Commission. Furthermore, the details of federal band use are incomplete. Although NTIA made a reasonable attempt to provide information about federal use of the bands proposed for reallocation, as well as some information on the use of adjacent bands, commenting parties were handicapped by the lack of access to the detailed federal frequency assignment records contained in the Government Master File ("GMF"). Without such access, and on the basis of only the information contained in the NTIA Preliminary Report, non-federal users are not fully equipped to assess NTIA's reallocation proposals. Because the FCC has access to the GMF, the Commission is in a position to act on behalf of non-federal users to ensure that federal operations will be compatible with any non-federal services planned.

³⁰ Title VI, *to be codified at* § 113(a)-(b).

³¹ *Id.*, *to be codified at* § 113(d)(1) (*emphasis added*).

NTIA has indicated that it will provide the FCC few, if any, suggestions on what specific services should be placed in the various bands to be reallocated, but that it may provide the Commission suggestions on what services should be avoided.³² It would have been helpful, however, if all such information had been provided in the NTIA Preliminary Report. Without such information (including specific sharing criteria), commenters were hampered in assessing the true net spectrum and associated potential use. Again, the Commission -- with its superior access to federal usage information -- is in a position to act on behalf of non-federal users to help determine what new services will be compatible in the three bands. In this regard, TIA believes it is critically important that bands be identified which can support the communications requirements of public safety and large industrial users, as identified in the COPE petition.

One possible way to identify alternative spectrum for immediate reallocation would be to reevaluate with NTIA any options previously rejected and whether any of the other seven bands identified for eventual reallocation can be reallocated in February 1995, or at least more quickly than proposed.

V. CONCLUSION

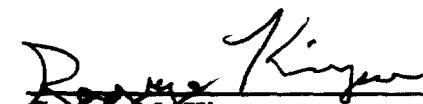
TIA believes that there are technical shortcomings in the three bands -- particularly the 2402-2417 MHz band -- proposed by NTIA for reallocation to non-federal use in February 1995. The presence of these flaws is due in part to defects in the process by which

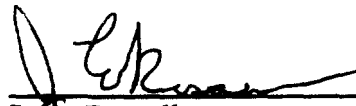
³² NTIA Open Meeting, April 7, 1994.

NTIA developed its proposals. TIA believes that these shortcomings will be corrected only if both NTIA and the FCC are flexible, and work together and with industry. TIA believes, therefore, that the Commission should proceed with all deliberate speed to find spectrum capable of accommodating critical needs such as crime control, energy conservation and management, health care, fire and emergency medical services, pollution control, improving industrial productivity, and IVHS. TIA believes that wide-area mobile services should receive a high priority for all spectrum identified below 3 GHz. Spectrum above 3 GHz is capable for supporting more localized mobile usage and fixed operations.

Respectfully submitted,

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Attachment 1

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U.S. Department of Commerce**

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Reallocation Report

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I. INTRODUCTION AND SUMMARY

The Telecommunications Industry Association ("TIA") is pleased to submit these comments on the Preliminary Spectrum Reallocation Report ("Preliminary Report"),¹ prepared by the National Telecommunications and Information Administration ("NTIA") as required in Title VI of the Omnibus Budget Reconciliation Act of 1993 ("Title VI").² TIA is comprised of representatives from the telecommunications equipment manufacturing community who will transform the reallocated spectrum into new services and offerings for American consumers. Thus, TIA has a clear interest in this proceeding.

TIA strongly supports the reallocation of federal government spectrum to private use. If judiciously selected, such spectrum could become a key part of the National Information Infrastructure ("NII"). TIA also supports reallocation that is accomplished in a manner that minimally affects federal agencies.

Experience has shown that whenever new spectrum is made available, the manufacturing community quickly develops new products to meet the needs and desires of the American public and improve the efficiency of American businesses. In this regard, TIA member companies envision the reallocated spectrum bands as potential homes for services such as wide area land mobile systems, microcellular and picocellular personal communications services, intelligent vehicle highway systems, and local area and wide area wireless data networks. Further, the reallocated spectrum bands located above 3 GHz also

¹ NTIA Special Publication 94-27 (Released February 10, 1994).

² Omnibus Budget Reconciliation Act of 1993, Pub. L. No. 103-66, § 6001, 107 Stat. 312, 379-401 (1993), *to be codified at* 47 U.S.C. §§ 111-117.

may prove particularly useful in satisfying the needs of the fixed microwave community relocating from the 2 GHz regions.

Notwithstanding the benefits of non-federal development and use of this "new" spectrum, TIA has significant concerns with the process employed by NTIA in formulating its Preliminary Report. In the same vein, TIA has concerns about the technical availability of the specific frequency bands proposed for reallocation. Indeed, as discussed in detail below, at least 15 MHz of the 50 MHz of spectrum to be reallocated immediately to non-federal use will provide little or no incremental benefit to NII development efforts.

While TIA hopes that the information provided herein can be referenced in developing a more suitable reallocation plan, TIA is frustrated because the requirements of Title VI and the process utilized by NTIA afford little opportunity for the private sector to influence the final reallocation decisions. NTIA's limitation of the process will only result in a weakened decision. Nevertheless, TIA urges NTIA to proceed swiftly with the reallocation effort so that the manufacturing community can begin work on introducing new products for American consumers.

II. DUE TO THE HIGHLY SPECIFIC REQUIREMENTS OF TITLE VI, AND THE PROCESS EMPLOYED BY NTIA, THE ABILITY OF THE PRIVATE SECTOR TO COMMENT UPON AND INFLUENCE THE REALLOCATION PROPOSALS IS GREATLY REDUCED

TIA recognizes that Title VI contains very specific requirements for the transfer of 200 MHz of federally-used radio frequency spectrum to non-federal use. These requirements -- which provide the criteria to be used to identify candidate spectrum bands for reallocation and the timing for such identification and eventual reallocation -- presumably were written

with great specificity in order to convey clearly Congress' purposes for making available new spectrum for non-federal use in a timely manner.³

The requirements of Title VI provided NTIA with a difficult task. In general, TIA commends NTIA for a thorough and timely analysis of federal and non-federal needs. Unfortunately, the specificity of Title VI prevented a full public discourse on this matter to the detriment of Congressional intent. TIA believes that the process employed in this proceeding has frustrated the efforts of non-federal parties to have meaningful input to the reallocation process. TIA discusses these problems in order to sensitize NTIA to private sector concerns in the hope that NTIA's final report considers all relevant factors in identifying spectrum that can be put to productive use for the public benefit. By reacting to the interests of the non-federal users, NTIA can better balance that goal while at the same time ensuring that the legitimate spectrum needs of federal users are satisfied.

A. PUBLIC COMMENTS WILL HAVE NO EFFECT ON THE INITIAL 50 MHZ TO BE REALLOCATED

Title VI requires that at least 50 MHz of the total 200 MHz in NTIA's Preliminary Report be recommended for "immediate" reallocation. Regrettably, NTIA officials have indicated that public comments and ensuing FCC analysis likely will not affect the choice of

³ In Title VI, Congress specifically directed NTIA to consider for reallocation only those spectrum bands that: (1) are allocated on a primary basis for federal government use; (2) are not required for the present or identifiable future needs of the federal government; (3) feasibly can be made available, as of the date of submission of the final report or at any time during the next 15 years, for non-federal use; (4) the transfer of which (from federal use) will not result in costs to the federal government, or loss of services or benefits to the public, that are excessive in relation to the public benefits that may be provided by non-federal licensees; and (5) *"are most likely to have the greatest potential for productive uses and public benefits under the [Communications Act of 1934] if allocated for non-federal use."* *Id.*, to be codified at § 113(a) (emphasis added). NTIA was provided a six month time frame from the date of enactment (August 10, 1993) to use these standards to develop its Preliminary Report. *Id.*, to be codified at § 113(d)(1).

the bands proposed for immediate reallocation.⁴ Thus, 50% of the "exclusive" spectrum and one quarter of the total spectrum to be reallocated has been selected without public input.

Although the timing requirements of Title VI are strict in this regard, there was nothing in the legislation that would have precluded NTIA from seeking public comment on the proposed 50 MHz *before* release of the Preliminary Report. If this had occurred, TIA would have been able to share with NTIA the concerns of some of its members about the technical validity of a large part of the spectrum identified for immediate reallocation, specifically, the 2402-2417 MHz band. As further discussed below, there are substantive concerns about the actual viability of bringing new services and products to this band. Had NTIA sought preliminary comments on this 50 MHz, it would have had sufficient time to identify alternatives more suitable to non-federal use.

B. ONLY 200 MHZ OF SPECTRUM IS IDENTIFIED

Under Title VI, the final report due to Congress and the President in February, 1995, must recommend for reallocation at least 200 MHz of spectrum.⁵ The Preliminary Report, however, is required to include "a preliminary identification of *reallocable bands of frequencies which meet the criteria* [in Section 113 of Title VI]."⁶ No other band choices were presented to non-federal commenters. Such a "take it or leave it" approach is not, however, conducive to meaningful private sector participation in the band selection process.

⁴ NTIA Open Meeting, April 7, 1994 (statement of Mr. Richard Parlow).

⁵ *Id.*, to be codified at § 113(a)-(b).

⁶ *Id.*, to be codified at § 113(d)(1) (emphasis added).